comprises a peptide, polypeptide, or protein and a metal chelating group consisting of a plurality of consecutive histidine residues from a sample in a vessel,

comprising the steps of:

(a) combining the sample containing the fusion protein with metal-chelate affinity particles suitable for binding said fusion protein, said affinity particles being insoluble in the sample;

(b) collecting the metal-chelate affinity particles;

(c) separating the metal-chelate affinity particles from the unbound remainder of the sample;

(d) optionally, resuspending the metal-chelate affinity particles in a solution;

(e) optionally, eluting said fusion protein from the metal-chelate affinity particles, followed by separating the metal-chelate affinity particles from said eluted fusion protein;

wherein at least one of steps (a), (b), (c), (d) if present, and (e) if present is performed in the presence of 0.0005 - 2 (v/v) % detergent sufficient to reduce loss of metal-chelate affinity particles during any separation step, in comparison to the same method performed in the absence of detergent.

8. (amended) The method according to Claim 2, wherein said metal chelating group is six consecutive histidine residues.

13. (amended) The method according to Claim 2, wherein said metal-chelate affinity particles are selected from the group consisting of ferromagnetic beads, superparamagnetic beads, and combinations thereof.

14. (twice amended) The method according to Claim 2, wherein said metal-chelate affinity particles are composed of materials selected from the group consisting of agarose, silica, nitrocellulose, cellulose, acrylamide, latex, polystyrene, polyacrylate, polymethacrylate, polyethylene polymers, glass particles, silicates, metal oxides, apatites, and combinations thereof.

17. (amended) The method according to Claim 2, wherein said detergent is selected from a group consisting of nonionic detergents, anionic detergents, zwitterionic detergents, cationic detergents, and combinations thereof.

B5

19. (twice amended) The method according to Claim 17, wherein said nonionic detergent is polyoxyethylene (20) sorbitol monolaurate at a concentration of at least about 0.005% (v/v).

34. (twice amended) A method for isolating a fusion protein, wherein said fusion protein comprises a peptide, polypeptide, or protein molecule and a metal chelating group consisting of a plurality of consecutive histidine residues from a sample in a vessel, comprising the steps of:

(a) providing a multiplicity of metal-chelate affinity particles and incubating said metal-chelate affinity particles in the presence of a detergent;

(b) combining the sample containing the fusion protein with metal-chelate affinity particles suitable for binding said fusion protein, said metal-chelate affinity particles being insoluble in the sample;

(c) collecting the metal-chelate affinity particles;

(d) separating the metal-chelate affinity particles from the unbound remainder of the sample;

(e) optionally, resuspending the metal-chelate affinity particles in a solution;

(f) optionally, eluting said fusion protein from the metal-chelate affinity particles, followed by separating the metal-chelate affinity particles from said eluted fusion protein;

wherein any of the steps (b), (c), (d), (e) if present, and (f) if present may optionally be also performed in the presence of 0.0005 - 2 (v/v) % detergent, wherein the use of detergent is sufficient to reduce loss of metal-chelate affinity particles during any separation step, in comparison to the same method performed in the absence of detergent.

39. (amended) The method according to Claim 34, wherein said metal chelating group is six consecutive histidine residues.

44. (twice amended) The method according to Claim 34, wherein said metal-chelate affinity particles are selected from the group consisting of ferromagnetic beads, superparamagnetic beads, and combinations thereof.

45. (twice amended) The method according to Claim 34, wherein said metal-chelate affinity particles are composed of materials selected from the group consisting of agarose, silica, nitrocellulose, cellulose, acrylamide, latex, polystyrene, polyacrylate, polymethacrylate, polyethylene polymers, glass particles, silicates, metal oxides, apatites, combinations thereof.

48. (amended) The method according to Claim 34, wherein said detergent is selected from a group consisting of nonionic detergents, anionic detergents, zwitterionic detergents, cationic detergents, and combinations thereof.

64. (twice amended) A method for isolating a fusion protein, wherein said fusion protein comprises a peptide, polypeptide, or protein molecule and a metal chelating group consisting of a plurality of consecutive histidine residues from a sample in a vessel, comprising the steps of:

(a) combining the sample containing the fusion protein with metal-chelate, magnetic affinity particles suitable for binding said fusion protein, said metal-chelate, magnetic affinity particles being insoluble in the sample;

(b) applying a magnetic field to the vessel so as to attract and immobilize the metal-chelate, magnetic affinity particles;

(c) separating the unimmobilized remainder of the sample from the immobilized metal-chelate, magnetic affinity particles;

(d) optionally, resuspending the metal-chelate, magnetic affinity particles in a solution;

(e) optionally, eluting said fusion protein from the metal-chelate, magnetic affinity particles, followed by separating the metal-chelate, magnetic affinity particles from said eluted fusion protein;

wherein at least one of steps (a), (b), (c), (d) if present, and (e) if present is performed in the presence of 0.0005 - 2 (v/v) % detergent sufficient to reduce loss of metal-chelate, magnetic affinity particles during any separation step, in comparison to the same method performed in the absence of detergent.

66. (twice amended) A method for isolating a fusion protein comprising a peptide, polypeptide, or protein and a metal chelating group consisting of a plurality of consecutive histidine residues from a sample in a vessel, comprising the steps of:

(a) providing a multiplicity of metal-chelate, magnetic affinity particles and incubating said metal-chelate, magnetic affinity particles in the presence of a detergent;

(b) combining the sample containing the fusion protein with said metal-chelate, magnetic affinity particles suitable for binding said fusion protein, said metal-chelate, magnetic affinity particles being insoluble in the sample;

(c) immobilizing the metal-chelate, magnetic affinity particles by applying a magnet to said vessel;

(d) separating the remainder of the sample from the immobilized metal-chelate, magnetic affinity particles;

(e) optionally, resuspending the metal-chelate, magnetic affinity particles in a solution;

(f) optionally, eluting said fusion protein from the metal-chelate, magnetic affinity particles, followed by separating the metal-chelate, magnetic affinity particles from said eluted fusion protein;

wherein any of the steps (b), (c), (d), (e) if present, and (f) if present may optionally be also performed in the presence of 0.0005 - 2 (v/v) % detergent, wherein the use of detergent is sufficient to reduce loss of metal-chelate, magnetic, affinity particles during any separation step, in comparison to the same method performed in the absence of detergent.

70. (new) The method for isolating a fusion protein according to any one of Claims 64-66, wherein said fusion protein comprises a peptide, polypeptide, or protein and a metal chelating group consisting of six consecutive histidine residues and said metal-chelate, magnetic affinity particles are nickel-nitrilotriacetic acid agarose beads.